

67/19

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O I P E

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/898,541

DATE: 07/24/2001

TIME: 11:18:13

[Input Set : A:\Seq 1st.txt]

Output Set: N:\CRF3\07242001\I898541.raw

**SEQUENCE LISTING**

- 1 (1) GENERAL INFORMATION:

2 (i) APPLICANT: Haughton, Alan  
3 Partida, Shirley M.  
4 Wu, Yiping  
5 Wang, Jiqun

6 (ii) TITLE OF INVENTION: Method and Reagents for Genetic  
7 Immunization

8 (iii) NUMBER OF SEQUENCES: 26

9 (iv) CORRESPONDENCE ADDRESS:

10 (A) ADDRESSEE: Oppenahl & Larson  
11 (B) STREET: PO Box 1270  
12 (C) CITY: Mississauga  
13 (D) STATE: ON  
14 (E) COUNTRY: USA  
15 (F) TEL: 905-441-5110

16 (v) COMPUTER READABLE FORM:

17 (A) MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb  
18 (B) COMPUTER TYPE: IBM Compatible  
19 (C) OPERATING SYSTEM: DOS 5.0  
20 (D) SOFTWARE: Word Perfect

21 (vi) CURRENT APPLICATION DATA:

C--> 22 (A) APPLICATION NUMBER: US/09/898,541  
C--> 23 (B) FILING DATE: 02-Jul-2001

24 (C) CLAIMSIFICATION:

25 (vii) PRIOR APPLICATION DATA:

26 (A) APPLICATION NUMBER:  
27 (B) FILING DATE:

28 (viii) ATTORNEY AGENT INFORMATION:

29 (A) NAME: Marina T. Larson  
30 (B) REGISTRATION NUMBER: 32,038  
31 (C) FIRM/BRANCH NUMBER: MSK.P-012

32 (ix) TELECOMMUNICATION INFORMATION:

33 (A) TELEPHONE: (+1) 668-2050  
34 (B) FAX: (+1) 668-1082  
35 (C) FAX:

36 (2) INFORMATION FOR SEQ ID NO: 1:

37 (i) SEQUENCE CHARACTERISTICS:

38 (A) LENGTH: 3  
39 (B) TYPE: amino acid  
40 (D) POLYPEPTIDE: linear

W--> 42 (ii) MOLECULE TYPE:

43 (A) DESCRIPTION: peptide

44 (iii) HYPOTHETICAL: no

45 (v) FRAGMENT TYPE: internal

46 (vi) ORIGINAL SOURCE:

47 (A) ORGANISM: human

ENTERED

RAW SEQUENCE LISTING  
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Input Set : A:\Seq\_lst.txt  
Output Set: N:\CRF3\07242001\I898541.raw

48 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
49 Glu Ala Asn Gln Pro Leu Leu Thr Asp  
50  
51 (2) INFORMATION FOR SEQ ID NO: 2:  
52 (i) SEQUENCE CHARACTERISTICS:  
53 (A) LENGTH: 8  
54 (B) TYPE: amino acid  
55 (C) TOPOLOGY: linear  
W--> 57 (ii) MOLECULE TYPE:  
58 (A) DESCRIPTION: peptide  
59 (iii) HYPOTHETICAL: no  
60 (iv) FRAGMENT TYPE: internal  
61 (vi) ORIGINAL SOURCE:  
62 (A) ORGANISM: human  
63 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
64 Glu Glu Lys Glu Pro Leu Leu Met Asp  
65  
66 (2) INFORMATION FOR SEQ ID NO: 3:  
67 (i) SEQUENCE CHARACTERISTICS:  
68 (A) LENGTH: 8  
69 (B) TYPE: amino acid  
70 (C) TOPOLOGY: linear  
W--> 72 (ii) MOLECULE TYPE:  
73 (A) DESCRIPTION: peptide  
74 (iii) HYPOTHETICAL: no  
75 (iv) FRAGMENT TYPE: internal  
76 (vi) ORIGINAL SOURCE:  
77 (A) ORGANISM: human  
78 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:  
79 Asp Ser Pro Leu Leu  
80  
81 (2) INFORMATION FOR SEQ ID NO: 4:  
82 (i) SEQUENCE CHARACTERISTICS:  
83 (A) LENGTH: 6  
84 (B) TYPE: amino acid  
85 (C) TOPOLOGY: linear  
W--> 87 (ii) MOLECULE TYPE:  
88 (A) DESCRIPTION: peptide  
89 (iii) HYPOTHETICAL: no  
90 (iv) FRAGMENT TYPE: internal  
91 (vi) ORIGINAL SOURCE:  
92 (A) ORGANISM: human  
93 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
94 Glu Asp Thr Pro Leu Leu  
95  
96 (2) INFORMATION FOR SEQ ID NO: 5:  
97 (i) SEQUENCE CHARACTERISTICS:  
98 (A) LENGTH: 12  
100 (B) TYPE: amino acid

RAW SEQUENCE LISTING  
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131 (i) TOPOLOGY: linear  
W--> 102 (ii) MOLECULE TYPE:  
132 (A) DESCRIPTION: peptide  
133 (iii) HYPOTHETICAL: no  
134 (iv) FRAGMENT TYPE: internal  
135 (v) ORIGINAL SOURCE:  
136 (A) ORGANISM: human  
137 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:  
138 Pro Ser Arg Asp Arg Ser Arg His Asp Lys Ile His  
139 10  
140 (2) INFORMATION FOR SEQ ID NO: 6:  
141 (i) SEQUENCE CHARACTERISTICS:  
142 (A) LENGTH: 9  
143 (B) TYPE: amino acid  
144 (C) STRANDEDNESS: single  
145 (D) TOPOLOGY: linear  
W--> 117 (ii) MOLECULE TYPE:  
146 (A) DESCRIPTION: peptide  
147 (iii) HYPOTHETICAL: no  
148 (iv) FRAGMENT TYPE: internal  
149 (v) ORIGINAL SOURCE:  
150 (A) ORGANISM: human  
151 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:  
152 Ser Gly Gly Ser Gly Gly Ser Gly Gly  
153 5  
154 (2) INFORMATION FOR SEQ ID NO: 7:  
155 (i) SEQUENCE CHARACTERISTICS:  
156 (A) LENGTH: 19  
157 (B) TYPE: nucleic acid  
158 (C) STRANDEDNESS: single  
159 (D) TOPOLOGY: linear  
160 (ii) MOLECULE TYPE: genomic DNA  
161 (iii) HYPOTHETICAL: no  
162 (iv) ANTI-SENSE: yes  
163 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:  
164 CGCCGACCGCA CTTTATAGC 19  
165 (2) INFORMATION FOR SEQ ID NO: 8:  
166 (i) SEQUENCE CHARACTERISTICS:  
167 (A) LENGTH: 45  
168 (B) TYPE: nucleic acid  
169 (C) STRANDEDNESS: single  
170 (D) TOPOLOGY: linear  
171 (ii) MOLECULE TYPE: genomic DNA  
172 (iii) HYPOTHETICAL: no  
173 (iv) ANTI-SENSE: no  
174 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:  
175 GCCTCCTGAA CCTCCGGTAC CACCAGAAGG GGAAACACAT CTG  
176 (2) INFORMATION FOR SEQ ID NO: 9:  
177 (i) SEQUENCE CHARACTERISTICS:  
178 (A) LENGTH: 48

RAW SEQUENCE LISTING  
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154      (B) TYPE: nucleic acid
155      (C) STRANDEDNESS: single
156      (D) TOPOLOGY: linear
157      (ii) MOLECULE TYPE: genomic DNA
158      (iii) HYPOTHETICAL: no
159      (iv) ANTI-SENSE: yes
160      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
161 TCTGGTGGTT TCGGAGGTC AGGAGCTAT ATTACCATTG CTGTAGTG 48
162 (2) INFORMATION FOR SEQ ID NO: 10:
163      (i) SEQUENCE CHARACTERISTICS:
164          A) LENGTH: 12
165          B) TYPE: nucleic acid
166          C) STRANDEDNESS: single
167          D) TOPOLOGY: linear
168          (ii) MOLECULE TYPE: genomic DNA
169          (iii) HYPOTHETICAL: no
170          (iv) ANTI-SENSE: no
171          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
172 GGTGCTTCG TAACTTGTCG CG 22
173 (2) INFORMATION FOR SEQ ID NO: 11:
174      (i) SEQUENCE CHARACTERISTICS:
175          A) LENGTH: 19
176          B) TYPE: nucleic acid
177          C) STRANDEDNESS: single
178          D) TOPOLOGY: linear
179          (ii) MOLECULE TYPE: genomic DNA
180          (iii) HYPOTHETICAL: no
181          (iv) ANTI-SENSE: yes
182          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
183 CGCCACCAGA CAAATAGC 19
184 (2) INFORMATION FOR SEQ ID NO: 12:
185      (i) SEQUENCE CHARACTERISTICS:
186          A) LENGTH: 12
187          B) TYPE: nucleic acid
188          C) STRANDEDNESS: single
189          D) TOPOLOGY: linear
190          (ii) MOLECULE TYPE: genomic DNA
191          (iii) HYPOTHETICAL: no
192          (iv) ANTI-SENSE: no
193          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
194 GGTGCTTCG TAACTTGTCG CG 22
195 (2) INFORMATION FOR SEQ ID NO: 13:
200      (i) SEQUENCE CHARACTERISTICS:
201          A) LENGTH: 42
202          B) TYPE: nucleic acid
203          C) STRANDEDNESS: single
204          D) TOPOLOGY: linear
205          (ii) MOLECULE TYPE: genomic DNA
206          (iii) HYPOTHETICAL: no

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/898,541

DATE: 07/24/2001  
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Input Set : A:\Seq\_1st.txt  
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207 (iv) ANTI-SENSE: yes  
208 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13  
209 CTCACCATAG CCTTGATACT GATTCTTCTG GTTTCTAGAA CG 42  
210 (2) INFORMATION FOR SEQ ID NO: 14:  
211 (i) SEQUENCE CHARACTERISTICS:  
212 (A) LENGTH: 42  
213 (B) TYPE: nucleic acid  
214 (C) STRANDEDNESS: single  
215 (D) TOPOLOGY: linear  
216 (E) MOLECULE TYPE: genomic DNA  
217 (F) HYPOTHETICAL: no  
218 (G) ANTI-SENSE: no  
219 (H) SEQUENCE DESCRIPTION: SEQ ID NO: 14  
220 CGTTCTTAGA GCAATTAACA TCACTAACAA CGCTATGCTG AG 42  
221 (2) INFORMATION FOR SEQ ID NO: 15:  
222 (i) SEQUENCE CHARACTERISTICS:  
223 (A) LENGTH: 1  
224 (B) TYPE: nucleic acid  
225 (C) STRANDEDNESS: single  
226 (D) TOPOLOGY: linear  
227 (E) MOLECULE TYPE: genomic DNA  
228 (F) HYPOTHETICAL: no  
229 (G) ANTI-SENSE: yes  
230 (H) SEQUENCE DESCRIPTION: SEQ ID NO: 15  
231 GAGTGCAGGG TGTTCGTT C 31  
232 (2) INFORMATION FOR SEQ ID NO: 16:  
233 (i) SEQUENCE CHARACTERISTICS:  
234 (A) LENGTH: 1  
235 (B) TYPE: nucleic acid  
236 (C) STRANDEDNESS: single  
237 (D) TOPOLOGY: linear  
238 (E) MOLECULE TYPE: genomic DNA  
239 (F) HYPOTHETICAL: no  
240 (G) ANTI-SENSE: no  
241 (H) SEQUENCE DESCRIPTION: SEQ ID NO: 16  
242 CCTGCACCTA TCGAACATA 31  
243 (2) INFORMATION FOR SEQ ID NO: 17:  
244 (i) SEQUENCE CHARACTERISTICS:  
245 (A) LENGTH: 1  
246 (B) TYPE: nucleic acid  
247 (C) STRANDEDNESS: single  
248 (D) TOPOLOGY: linear  
249 (E) MOLECULE TYPE: genomic DNA  
250 (F) HYPOTHETICAL: no  
251 (G) ANTI-SENSE: no  
252 (H) SEQUENCE DESCRIPTION: SEQ ID NO: 17  
253 TACTGCTATG GCAATGATAT TGGTACACT A 31  
254 (2) INFORMATION FOR SEQ ID NO: 18:  
255 (i) SEQUENCE CHARACTERISTICS:

**VERIFICATION SUMMARY**PATENT APPLICATION: **US/09/898,541**

DATE: 07/24/2001

TIME: 11:18:14

Input Set : **A:\Seq\_1st.txt**Output Set: **N:\CRF3\07242001\I898541.raw**

L:22 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:23 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:42 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1  
L:57 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2  
L:72 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3  
L:87 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4  
L:102 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5  
L:117 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6